

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method of driving a display panel made up of (n x m) display elements respectively disposed at different crossover points of a matrix formed of n rows of scanning lines and m columns of data lines, the method comprising variably controlling respective constant current values for driving the respective data lines,

wherein said variably controlling the constant current values is implemented by individually comparing a reference voltage with a voltage of each of the respective data lines as driven by the constant current values, using respective comparators each having a first input connected to the reference voltage and a second input connected to a respective one ~~different ones~~ of the ~~respective~~ data lines, and

wherein said variably controlling the constant current values is further implemented by supplying a constant current to the data lines by respective first transistors, and by supplying an adjustment current to the data lines by respective second transistors responsive to control signals output from the comparators.

Claims 2-5 (Canceled)

Claim 6 (Original): The method of driving a display panel according to claim 1, wherein the display elements are organic EL elements.

Claim 7 (Currently Amended): A drive of a display panel for driving (n x m) display elements respectively disposed at different crossover points of a matrix formed of n rows of scanning lines and m columns of data lines, the display elements each having an anode connected to a respective one of the data lines and a cathode connected to a respective one of the scanning lines, the drive comprising:

first switching means for changing over between connection of the respective data lines to respective variable current sources and connection thereof to ground;

second switching means for changing over a potential of the respective scanning lines between a power supply potential and ground;

driving means for controlling the first switching means and second switching means responsive to input data;

comparison means respectively provided for each of the data lines, said comparison means each having a first input coupled to ~~different ones~~ a respective one of the ~~respective~~ data lines and for outputting a control signal by comparing a reference voltage from a reference voltage generator with a potential of the respective one of the data lines; and

current control means for individually controlling respective current values flowing from the variable current sources to the respective data lines, based on respective results of comparison executed by the comparison means,

each of the variable current sources having a first transistor and a second transistor connected to the respective data lines, the first transistors supplying constant currents to the respective data lines, and the second transistors supplying adjustment currents to the respective data lines responsive to the control signals.

Claim 8 (Previously Presented): The drive of a display panel according to claim 7, wherein the comparison means detect a decrease in current of the respective variable current sources based on an increase in potential of the respective data lines to thereby control an increase of the current of the respective variable current sources, and detect an increase in the current of the respective variable current sources based on a drop in the potential of the respective data lines to thereby control a decrease of the current of the respective variable current sources.

Claims 9-10 (Canceled)

Claim 11 (Original): The drive of a display panel according to claim 7, wherein the

display elements are organic EL elements.

Claim 12 (Currently Amended): A drive of a display panel for driving (n x m) display elements respectively disposed at respective crossover points of a matrix formed of n rows of scanning lines and m columns of data lines, the display elements each having an anode connected to a respective one of the data lines and a cathode connected to a respective one of the scanning lines, the drive comprising:

a first switching unit that changes over between connection of the respective data lines to respective variable current sources and connection thereof to ground;

a second switching unit that changes over a potential of the respective scanning lines between a power supply potential and ground;

a drive control circuit that controls the first switching unit and the second switching unit responsive to input data;

comparators respectively provided for each of the data lines, the comparators each having a first input coupled to a respective one ~~different ones~~ of the respective data lines, the comparators each output control signals by comparing a reference voltage from a voltage regulator with a potential of the respective one of the data lines; and

current control circuits respectively provided for each of the data lines, the

current control circuits individually control current values flowing from the respective variable current sources to the respective one of the data lines, based on respective results of comparison by the comparators,

each of the variable current sources having a first transistor and a second transistor connected to the respective data lines, the first transistors supplying constant currents to the respective data lines and the second transistors supplying adjustment currents to the respective data lines responsive to the control signals.

Claim 13 (Previously Presented): The drive of a display panel according to claim 12, wherein the comparators detect a decrease in the current of the respective variable current sources based on an increase in the potential of the respective data lines to thereby control an increase of the current of the respective variable current sources, and detect an increase in the current of the respective variable current sources based on a drop in the potential of the respective data lines to thereby control a decrease of the current of the respective variable current sources.

Claims 14-15 (Canceled)